

Application No. 09/731,506

Applicants: Albert Erdrich et al.

Amendment in Response to Office Action dated September 30, 2003

Amendments to the Claims:

The present listing of the claims replaces all past listings of the claims:

Listing of claims:

Claim 1. (Previously Presented) Dental isolation material, comprising:

10 - 60 wt.-% water

30 - 85 wt. % C₂-C₄ alcohol

2 - 10 wt.-% polyvinyl alcohol and

0 - 30 wt.-% acetone.

Claim 2. (Previously Presented) Dental isolation material according to claim 1, comprising:

40 - 50 wt.-% water

45 - 55 wt. % C₂-C₄ alcohol

3 - 8 wt.-% polyvinyl alcohol and

0 - 5 wt.-% acetone.

Claim 3. (Previously Presented) Dental isolation material according to claim 1, wherein the C₂-C₄ alcohol is ethanol.

Claim 4. (Previously Presented) Dental isolation material according to claim 1, wherein polyvinyl alcohol has a molecular mass greater than 60,000g/mol.

Application No. 09/731,506

Applicants: Albert Erdrich et al.

Amendment in Response to Office Action dated September 30, 2003

Claims 5 – 16 . (Cancelled).

Claim 17. (Previously Presented) Method for making a prosthesis comprising the following steps:

- a) Overmodeling a dental trial fitting with an investment material to create an individual flask or rim,
- b) Curing the investment material by electromagnetic radiation,
- c) Coating an inside of the investment material with a dental isolating material according to claim 1,
- d) Pouring a dental plastic into the individual flask or rim and
- e) Deflasking by shattering the investment material.

Claims 18 – 29. (Cancelled).

Claim 30. (Previously Presented) Prosthesis, which is made by a method of claim 17.

Claim 31. (Previously Presented) Method according to claim 17, wherein the investment material comprises:

- 10 - 30 wt.- % polyethylene glycol dimethacrylate,
- 40 - 55 wt. % polymethyl methacrylate,
- 5 – 15 wt.- % highly disperse silicon dioxide

Application No. 09/731,506

Applicants: Albert Erdrich et al.

Amendment in Response to Office Action dated September 30, 2003

< 1 wt. % photoinitiators, stabilizers,

0 – 10 wt.- % polyethylene glycol and

10 – 30 wt.- % of at least one compound selected from the group consisting of:

urethane dimethacrylate, bis-GMA, and ethoxylated bis-GMA.

Claim 32. (Previously Presented) Method according to claim 31, wherein the investment material comprises:

15 - 20 wt.- % polyethylene glycol dimethacrylate,

50 wt. % polymethyl methacrylate

10 – 15 wt.- % at least one compound selected from the group consisting of: urethane dimethacrylate, bis-GMA, and ethoxylated bis-GMA,

10 – 13 wt.- % highly disperse silicone dioxide,

0.4 – 0.6 wt.- % photoinitiators, stabilizers, and

5 – 10 wt.-%polyethylene glycol.

Claim 33. (Previously Presented) Method according claim 31, wherein the polyethylene glycol dimethacrylate has a molecular mass > 500 g/mol.

Claim 34. (Previously Presented) Method according to claim 31, wherein the polyethylene glycol dimethacrylate is a solid at a temperature (T) of approximately 20° C.

Claim 35. (Previously Presented) Method according to claim 31, wherein the polymethyl

Application No. 09/731,506

Applicants: Albert Erdrich et al.

Amendment in Response to Office Action dated September 30, 2003

methacrylate has a molecular mass of $> 160,000$, an average grain size of $80 - 140 \mu\text{m}$ and a benzoyl peroxide content $< 0.1 \text{ wt.-%}$.

Claim 36. (Previously Presented) Method according to claim 31, wherein the polymethyl methacrylate is a copolymer comprising up to 10 wt.-% comonomer.

Claim 37. (Previously Presented) Method according to claim 31, wherein the polyethylene glycol is a fluid at a temperature (T) of approximately 20°C and has an average molecular mass of 200 g/mol .

Claim 38. (Previously Presented) Method according to claim 31, wherein the urethane dimethacrylate has a minimum molar mass of 450 g/mol .

Claim 39. (Previously Presented) Method according to claim 31, wherein the polymethyl methacrylate is in the form of a suspension polymerizate.

Claim 40. (Previously Presented) Method according to claim 17, wherein the dental plastic is curable by means of electromagnetic radiation.

Claim 41. (Previously Presented) Method according to claim 31, further comprising the step of setting up retentions after overmodeling and before coating.

Application No. 09/731,506

Applicants: Albert Erdrich et al.

Amendment in Response to Office Action dated September 30, 2003

Claims 42 – 48. (Canceled).

Claim 49. (New) A total or partial prosthesis comprising an isolation material according to
claim 1.